

## Claims

1. A method of performing compressed mode measurements for selecting communication means in a communication system, said  
5 communication system comprising a network element and a plurality of communication means for serving a mobile station and, said method comprising:
  - providing information associated with the plurality of communication means to the network element, said information based on a plurality of  
10 parameters associated with each of the plurality of communication means;
  - ordering the communication means based on said information; and
  - performing compressed mode measurements at the mobile station based on said ordering.
- 15 2. A method as claimed in claim 1, wherein the selection is for handover of the mobile station from a first communication means to a second communication means.
3. A method as claimed in claim 2, wherein the first communication  
20 means operates at a first frequency of a radio access technology and the second communication means operates at a second frequency of said radio access technology.
4. A method as claimed in claim 3, wherein the radio access technology  
25 is code division multiple access.
5. A method as claimed in claim 3, wherein the radio access technology is wideband code division multiple access.
- 30 6. A method as claimed in claim 2, wherein the first communication means operates in accordance with a first radio access technology, and the second communication means operates in accordance with a second, different, radio access technology.

7. A method as claimed in claim 6, wherein the first radio access technology is code division multiple access.
8. A method as claimed in claim 6, wherein the first radio access technology is wideband code division multiple access.
9. A method as claimed in any one of claims 2 to 8, wherein the second communication means comprises a plurality of cells, and the compressed mode measurements comprise signal strength measurements of at least one of said plurality of cells.
10. A method as claimed in claim 9 when dependent upon any one of claims 6 to 8, wherein the compressed mode measurements comprise decoding a parameter associated with at least one of the plurality of cells.
11. A method as claimed in claim 10, wherein the parameter is the base station identification code associated with one of the plurality of cells.
12. A method as claimed in any preceding claim, wherein the plurality of parameters comprises at least one of the following: a real time load, a non real time load, a service priority weight or a signal to interference ratio.
13. A method as claimed in any preceding claim, wherein the information comprises a weighting value.
14. A method as claimed in any preceding claim, wherein the communication means are ordered in a prioritised order.
15. A method as claimed in any preceding claim, wherein the network element is a radio network controller.
16. A method as claimed in any preceding claim, wherein the information is provided by a common resource radio management.

17. A method as claimed in claim 16, wherein the common resource radio management is a common radio management server.

5 18. A communication system comprising:

a network element;

a mobile station;

a plurality of communication means, said communication means being arranged to provide communication services to said mobile station;

10 means for providing information associated with the plurality of communication means to the network element, said information being based on a plurality of parameters associated with each of the plurality of communication means; and

15 means for ordering the communication means being based on said information;

said mobile station being arranged to perform compressed mode measurements based on said ordering for selecting one of the plurality of communication means.

20 19. A method of determining a threshold for a cell in a communication system, said communication system comprising said cell and a plurality of other cells, said method comprising the steps of:

collecting statistics on the handovers from said cell to said plurality of other cells;

25 weighting the cell load of each cell of said plurality of other cells by the percentage of handovers from said cell to respective one of said plurality of other cells; and

determining the threshold based on said weighted cell loads.

30 20. A method as claimed in claim 19, wherein said weighting comprises multiplying said cell load by said percentage for each cell.

21. A method as claimed in claim 20, wherein the threshold is determined by adding together all said weighted cell loads.